PLAN IT!

NEVADA DOT

Quarterly Newsletter of the Planning Division

2nd Quarter, 2011

Safety Engineering

The NDOT Safety Engineering Section is responsible to identify, analyze, and investigate projects and improvements that will enhance the safety of the traveling public through the Nevada Highway Safety Improvement Program (HSIP) and is an integral component of Nevada's Strategic Highway Safety Plan (SHSP). The five emphasis areas of the SHSP are: seat belts, impaired driving, lane departures, intersections and pedestrians. Please go to www.drivesafenv.com for additional information regarding the SHSP. The section also responds to many requests from governmental agencies, NDOT staff and others.

zero Fatalities
Drive Safe Nevada

Safety is the number one priority at NDOT. NDOT Director Susan Martinovich discussed the Zero Fatalities Traffic Safety Program at the 2011 AASHTO Spring Meeting in Las Vegas; "When we each drive off to work, for a trip or errand, we expect to return safely. Whether due to unsafe driving or something else, that strategy doesn't always happen on Nevada roads. As drivers, as citizens, as transportation experts, it is time to stand up and say there is no number other than zero deaths that is acceptable on our roads. Zero Fatalities begins today with each Nevadan deciding to drive safely each time they get in their car."

Inside This Issue

Back row (left to right) Jim Ceragioli, Kim Stalling, Gary Ogren, Jon Allen, Chris Wright, Peter Aiyuk, Mark Sinnott, Ken Mammen, Matt Banes, Chuck Reider
Front row (left to right) Grahame Ross, Tom Lightfoot, Tara Smaltz, Lori Campbell, Chris Jalkson, Christy Borges, Dianna Marshall, Jaime Tuddao, Lawrence Black, Jenny Hartley
(Not pictured Kathleen Sturgeon)

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Highway Safety Improvement Program (HSIP)

The overall goal of the HSIP is to achieve a significant reduction in traffic fatalities and serious injuries on all public roads. The following programs are part of the HSIP: Strategic Highway Safety Plan (SHSP),State Highway Safety Improvement Program (SHSIP) and the Railway-Highway Grade Crossing Program (RHGCP)(Sec. 130). The State Highway Safety Improvement Program (SHSIP) has five sub areas: High Crash Location (HCL), High Risk Rural Roadway Program (HRRRP), Systemic Approach, Pedestrian, and Ad Hoc.

The HSIP consists of three components: planning, implementation and evaluation. The planning component has three sections which include problem identification, countermeasure identification and project prioritization. Within the problem identification section, Safety identifies the High Crash Locations (HCLs) and High Crash Segments. These segments and HCLs are selected by specific criteria and can be on any public road in Nevada. Also, in the problem identification, Safety evaluates specific crash types that may have opportunities to complete projects systemically. In terms of countermeasure identification, Safety evaluates both HCL's and segments to identify mitigation strategies and countermeasures for reducing specific crash types and ultimately to reduce fatalities and severe injuries. The project prioritization section is where the projects are prioritized based on calculations and recommendations from the countermeasure identification process.

Safety then takes the projects that have been prioritized and schedules them using federal funding with a local or state match. These projects are added to the STIP as they become identified and are implemented.

Three years after a safety project has been constructed, Safety conducts a before and after study to evaluate the effectiveness of the countermeasure selection for that project. Safety continues to evaluate the HSIP program to determine if the countermeasures, SHSP initiatives, and safety decisions are achieving their main goal which is to reduce traffic fatalities and severe injuries on all public roadways.

Safety improvements that can be done under this program include: transportation safety planning, intersection safety improvements, installation of rumble strips, elimination of roadside obstacles or hazards, pedestrian or bicycle safety improvements, pavement and shoulder widening, installation of guardrails, and barriers along with RSAs.

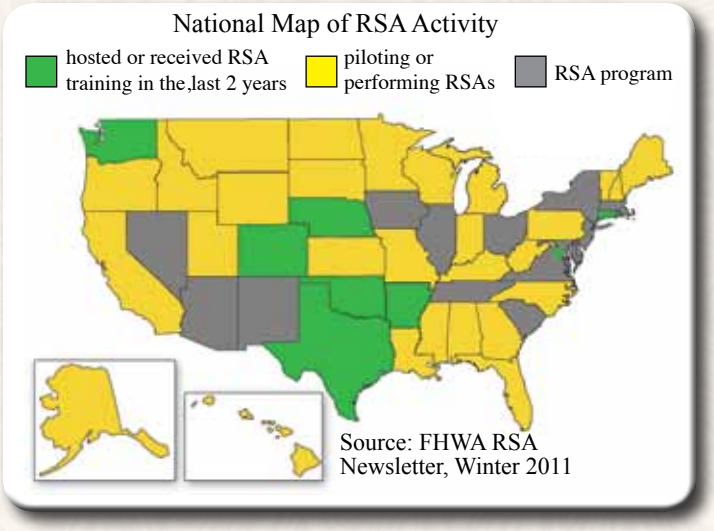
For additional information on the Highway Safety Improvement Program or the State Highway Safety Improvement Program, please contact Jim Ceragioli, Senior Safety Coordinator, via email at *jceragioli@dot.state.nv.us* or : (775) 888-7462.

Road Safety Audits (RSA)

In a continuing effort to improve road safety and reduce the number and the severity of crashes on Nevada roadways, over 100 transportation and road safety experts have taken part in NDOT Road Safety Audits. The audits consist of the identification of safety issues and recommendations.

A formal safety evaluation of either planned or existing roadways by an independent, multidisciplinary team of NDOT staff, law enforcement, emergency medical responders and local city and regional transportation commission representatives is conducted. The audit looks for both existing conditions and potential safety issues and suggest measures to mitigate these safety issues.

The audits begin when NDOT safety engineers coordinate with NDOT project managers to dispatch teams of three or more experts to evaluate certain existing roads or new transportation projects from a safety perspective. Performing both day and night field reviews, the teams look at how all users interact on a roadway, and review any potentially confusing road elements such as signs, trap lanes, skewed right hand turn lanes, and poor nighttime visibility.



The teams then submit specific safety recommendations to NDOT project managers for possible inclusion in the projects. Focusing only on safety-related issues, the audits are not technical reviews of project design compliance, and therefore can often provide low-cost safety recommendations. For instance, some safety enhancements can easily be put in place by NDOT maintenance professionals.

For additional information about RSAs, please contact Jaime Tuddao, NDOT Senior Road Safety Engineer, via email at ***jtuddao@dot.state.nv.us*** or 775-888-7467.

Data/Analyst

The goal of this work group is to provide accurate crash data and analysis to all stakeholders; cities, counties, consulting firms, news agencies, the public and other NDOT divisions. In 2010, some 954 requests were made and fulfilled for this information. The Safety Engineering Division uses the data to support the SHSP, HSIP, RSA and STIP programs. Additionally, Safety Engineering annually publishes the Nevada Traffic Crash Book.

They coordinate and maintain fatal crash and crash data that is supplied to NDOT from local law enforcement, news sources, NHP, and Nevada Office of Traffic Safety and maintain the integrity of the crash data warehouse, NCATS (Nevada Citation and Accident Tracking System), by coordinating with DPS Records and Technology, reporting agencies and Divisions statewide. NDOT also enters crash data from law enforcement agencies that do not have access to electronic crash reporting.

Data/Analysis "By the Numbers: 2009"

Number of Crashes: 53,151
- Fatal Crashes: 223
- Fatalities: 243
- Injury Crashes: 18,472
- Injuries: 27,297

Property Damage Only: 34,456

They also compile crash rates based on NDOT Functional Classified Roadways, Annual Vehicle Miles Traveled and traffic crashes that happen on all roadways. Roadways can be on and off the NDOT Roadway System.

Safety Engineering actively participates in the statewide Traffic Records Coordinating Committee that meets on a quarterly basis. This group, represented by Nevada DMV, DPS, DOT, local law enforcement agencies, the judiciary, emergency medical services, and other federal and non-federal partners, works together toward the common goal of improving the timeliness, accuracy, completeness, uniformity, and accessibility of traffic-related data needed to identify priorities for national, state, and local highway and traffic safety programs.

For additional information on the Data/Analyst group please contact Kim Stalling , Data Manager, via email at ***kstalling@dot.state.nv.us*** or (775) 888-7204. To request crash data please go to ***http://www.nevadadot.com/Documents/Nevada_Traffic_Crash_Data.aspx.***

GIS

The GIS Section supports the safety engineering staff in all aspects of GIS use. They maintain and update the GIS layers used by engineers for the various programs previously mentioned. Specifically, they update and maintain the synchronization of the various layers derived from and including the CDS and SDS road networks, and they update and verify the spatial relationship of the crash data to the road network. GIS helps safety staff who have GIS questions, GIS software and hardware issues. They create maps for inclusion into yearly reports and numerous meetings throughout the year. They also manage NDOT's interest in safety related GIS projects we develop in-house and with different RTCs.

For additional information about the Safety Engineering GIS, please contact Lawrie Black, Senior GIS Analyst, via email at ***lblack@dot.state.nv.us*** or 775-888-7206.

Did you know?

NDOT won the 2011 Carson City Bike to Work Week Corporate Challenge in both total mileage and trips. Great job Team NDOT!

Bike/Ped Conference Update

175 attendees enjoyed the presentations, networking and educational opportunities that abounded at the 2011 Spring Bike/Pedestrian conference recently held in Reno. Willie Weir a writer, photographer, and bicycle advocate from Seattle, encouraged the crowd with a great speech at lunch. Staff has received many positive comments regarding the conference.

Keep checking the Key Dates section for future conference dates.

2011 Bike/Ped Conference

Meet the Planner

Manju Kumar, P.E., Research Coordinator
NDOT Research

Manju Kumar

Manju was born and raised in a rural area of southern India. He graduated from college and then enrolled at Virginia Tech where he earned his Master's degree in Civil Engineering. Shortly after completion of his degree, Manju lived in Bozeman, Montana for about five years where he began working as a Research Associate and then as Research Engineer at the Western Transportation Institute at Montana State University.

He got married and spent a short time as an engineering consultant in the Phoenix area before moving to the San Francisco Bay area where he worked as a Senior Engineer at the University of California, Berkeley California Center for Innovative Transportation (CCIT). At CCIT, he worked on accelerating deployment of technical solutions and implementation of research results, the critical "Last Mile of Research" to improve the transportation system. He has been working at NDOT since 2010 and is a Registered Professional Engineer (P.E.) in Nevada, Montana and Arizona. Additionally, Manju recently joined Toastmasters.

Manju enjoys the West for a few reasons, including the open space, relaxed attitudes and the hospitality. "I feel at home in the West," Manju said. His wife is an internal medicine resident at the University of Nevada School of Medicine in Reno. The Kumars also have a son, Siddhran. They enjoy hiking and camping along with other outdoor activities available in the Western Nevada region.

Key Dates

July 11, 2011	Transportation Board Meeting
July (TBA)	Nevada Bicycle & Pedestrian Advisory Board
August 8, 2011	Statewide Transportation Technical Advisory Committee (STTAC)
September 12, 2011	Statewide Transportation Technical Advisory Committee (STTAC)
September 13, 2011	Product Evaluation Committee
September 21, 2011	Milepost Team Meeting

Annual Traffic Report Data is Available

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